

IN THE CLAIMS

Please amend the following Claims as indicated.

1. (Currently amended) An error correction method for use with a noisy .
communication channel, said method comprising the steps of:
dividing a data stream into symbols;
sampling the divided data stream ~~in~~ and placing samples into threads, wherein samples
5 are taken at fixed time intervals;
inserting a correction symbol ~~into the data stream~~ into the data stream to mix the correction symbol with data
symbols, by inserting the correction symbol next to data symbols that have a fixed time
separation;
transmitting the data stream;
10 receiving the transmitted data stream;
performing error detection and correction computations on the data and error correction
symbols; and
outputting an error corrected data stream.

2. (Currently amended) The method of Claim 1 wherein the ~~bursty~~ noisy
communication channel comprises a satellite communication link.

3. (Currently amended) The method of Claim 1 wherein the ~~bursty~~ noisy
communication channel comprises a scratched compact disk.

4. (Currently amended) The method of Claim 1 wherein the ~~incoming data stream~~
~~comprises~~ symbols are in the form of bits.

5. (Currently amended) The method of Claim 1 wherein the ~~incoming data stream~~
~~comprises~~ symbols are in the form of bytes.

6. (Currently amended) The method of Claim 1 wherein the ~~incoming data stream~~
~~comprises~~ symbols are in the form of words.

7. (Currently amended) The method of Claim 1 wherein samples are taken at fixed
time intervals that are longer than the time ~~interval of the bursts of data~~ intervals of error bursts
caused by the noisy channel.

8. (Currently amended) The method of Claim 1 wherein the step of performing error
detection and correction comprises performing error correction with a cyclic redundancy check
~~error correction~~.

9. (Currently amended) The method of Claim 1 wherein the step of inserting a correction symbol into the data stream comprises the step of inserting the same correction symbol in more than one thread.

10. (Currently amended) An error correction method for use with a noisy communication channel, said method comprising the steps of:

receiving an incoming data stream;

copying each data symbol that is to be transmitted onto a register;

5 placing each data symbol onto a transmit output buffer in a predetermined position, wherein positions between ~~each the data symbol~~ symbols are filled with error correcting symbols calculated after a register gets filled;

transmitting a symbol transmission stream from the transmit output buffer;

receiving the transmitted transmission stream;

10 placing data and error correction symbols from the symbol transmission stream on predetermined registers;

performing error detection and correction computations on the data and error correction symbols;

placing the corrected data symbols on a receive output buffer in their correct positions;

15 and

outputting an error corrected data stream from the receive output buffer.

11. (Currently amended) The method of Claim 10 wherein the ~~bursty noisy~~ communication channel comprises a satellite communication link.

12. (Currently amended) The method of Claim 10 wherein the ~~bursty noisy~~ communication channel comprises a scratched compact disk.

13. (Currently amended) The method of Claim 10 wherein the ~~incoming data stream~~ comprises symbols are in the form of bits.

14. (Currently amended) The method of Claim 10 wherein the ~~incoming data stream~~ comprises symbols are in the form of bytes.

15. (Currently amended) The method of Claim 10 wherein the ~~incoming data stream~~ comprises symbols are in the form of words.

16. (Currently amended) The method of Claim 10 wherein samples are taken at fixed time intervals that are longer than the time ~~interval of the bursts of data~~ intervals of error bursts caused by the noisy channel.

17. (Currently amended) The method of Claim 10 wherein the step of performing error detection and correction comprises performing error correction with a cyclic redundancy check ~~error correction~~.

18. (Currently amended) The method of Claim 10 wherein the step of inserting a correction symbol into the data stream comprises the step of inserting the same correction symbol ~~is~~ in more than one thread.
